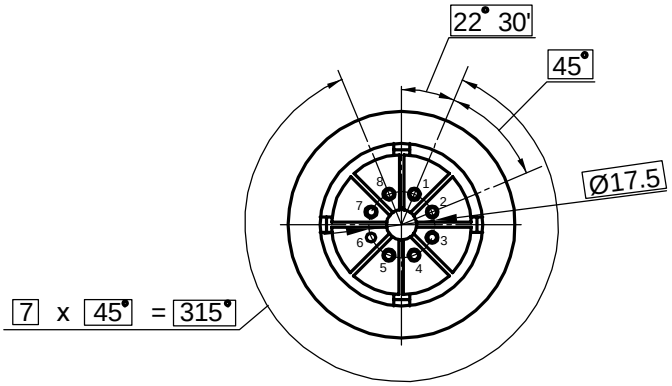
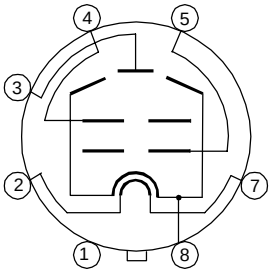
Vacuum tube KT120 Tung - Sol is a beam tetrode in the glass bulb with octal base, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

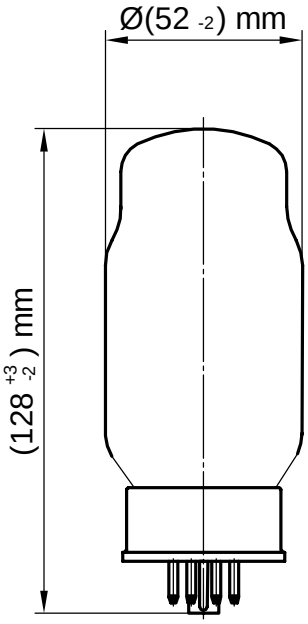
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



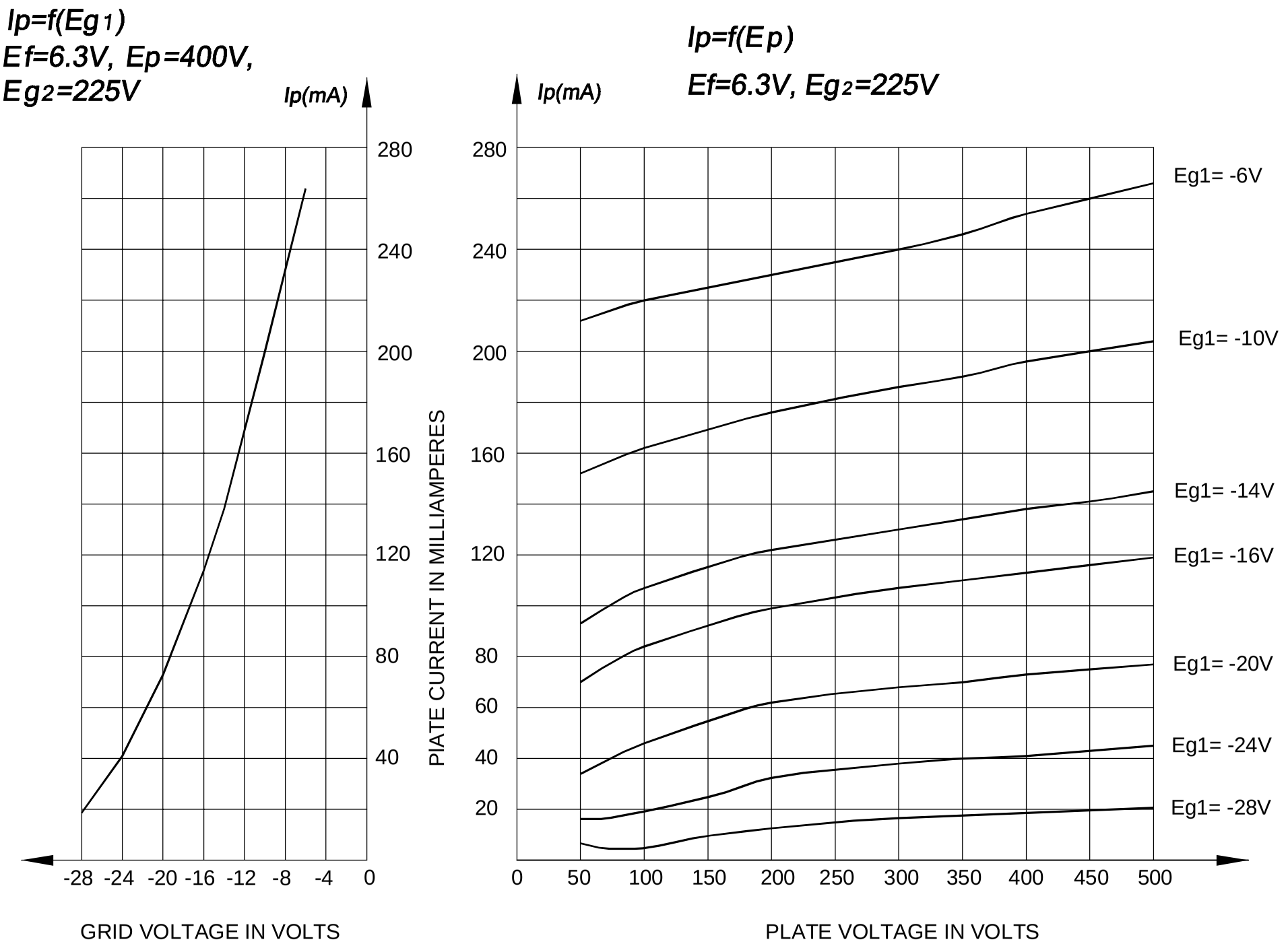
Lead designation	Name of electrode
1	Outer metal screen
2, 7	Heater
3	Plate
4	Grid 2
5	Grid 1
6	No
8	Cathode, beam-forming screen

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V, plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V,first grid circuit resistance 0.51M Ω)	—	0.5
Heater current, A	1.65	1.95
Plate current, mA (at: filament voltage 6.3 V, plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V)	120	165
Second grid current, mA (at: filament voltage 6.3 V, plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V)	—	20
Output power, W (at: filament voltage 6.3 V, plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V, plate circuit resistance 3.0 k Ω first grid alternating voltage, efficacious 9.9 V)	18	—
First grid cut-off voltage, negative, V (at: filament voltage 6.3 V, plate voltage 400 V, second grid voltage 225 V,)	—	60
Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V)	11	—
Cahtode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode -heater voltage ± 300 V)	6.0	—

Operating conditions limits.

Parameters, units	Nominal	
	min	max
Filament voltage, V	6.0	6.6
Cathode - heater voltage, V	—	± 300
Cathode current, mA	—	250
First grid voltage, negative, V	—	200
Power dissipation at the plate, W	—	66
Power dissipation at the second grid, W	—	8
First grid circuit resistance ,M Ω	—	0.51
Temperature at the most heated part of the envelope, K°	—	523


Ip=f(Eg1)
Ef=6.3V, Ep=400V,
Eg2=225V
Ip(mA)
280
240
200
160
120
80
40
-28 -24 -20 -16 -12 -8 -4 0
GRID VOLTAGE IN VOLTS
Ip=f(Ep)
Ef=6.3V, Eg2=225V
Ip(mA)
280
240
200
160
120
80
60
40
20
0 50 100 150 200 250 300 350 400 450 500
PLATE VOLTAGE IN VOLTS
PIATE CURRENT IN MILLIAMPERES
Eg1= -6V
Eg1= -10V
Eg1= -14V
Eg1= -16V
Eg1= -20V
Eg1= -24V
Eg1= -28V